IN THE CLAIMS

1 - 13. (Cancelled)

14. (New) A system for scanning objects in an object scanning area on a support surface comprising:

a linear array sensor adapted to detect light input signals;

a lens optically connected to the linear array sensor, the lens adapted to receive and transmit an optical image located in an optical field of view of the linear array sensor;

a light source with a lens that produces an illumination plane that has a height that extends over a depth of field and a width that extends across the support surface so that an illumination stripe is formed on a surface of the object in the optical field of view; and

the illumination plane and the optical field of view are coplanar over the depth of field in the object scanning area.

15. (New) The system for scanning objects of claim 14, wherein the light source lens is a cylindrical lens.

16. (New) The system of claim 15, wherein the cylindrical lens is a Fresnel lens.

17. (New) The system for scanning objects of claim 14, wherein the linear array sensor is a CCD image sensor.

18. (New) The system for scanning objects of claim 14, wherein the linear array sensor is a CMOS image sensor.

19. (New) The system for scanning objects of claim 14, wherein the light source lens has a center slit co-planar with the optical field of view to allow reflected light from the surface of the object to return to the linear array sensor without being effected by the light source lens.

20. (New) The system for scanning objects of claim 14, wherein the light source is an array of LEDs.

21. (New) The system for scanning objects of claim 20, wherein the array of LEDs is linear.

22. (New) The system for scanning objects of claim 21, wherein the linear array of LEDs, an axis of the light source lens and the illumination plane are coplanar.

23. (New) The system for scanning objects of claim 14, wherein the light source is an array of semiconductor lasers.

24. (New) The system for scanning objects of claim 23, wherein the array of semiconductor lasers is linear.

25. (New) The system for scanning objects of claim 24, wherein the linear array of semiconductor lasers, an axis of the light source lens and the illumination plane are coplanar.

26. (New) A system for scanning objects in an object scanning area, comprising:

a linear array sensor adapted to detect light input signals;

a lens optically connected to the linear array sensor, the lens adapted to receive and transmit an optical image located in an optical field of view to the linear array sensor; and

a light source with a lens that produces an illumination plane that has a height that extends over a depth of field and a width that extends across the support surface so that an illumination stripe is formed on a surface of the object, the light source being positioned so that the optical field of view is coincident with the illumination stripe at the surface of the object.

27. (New) The system for scanning objects of claim 26, wherein the light source includes multiple linear rows of light emitters.

28. (New) The system for scanning objects of claim 27, wherein a controller is connected to the light source, the controller adapted to energize and de-energize selected linear rows of the light emitters.

29. (New) The system for scanning objects of claim 26, wherein the light source lens is a cylindrical lens.

30. (New) The system for scanning objects of claim 29, wherein the cylindrical lens is a Fresnel lens.

31. (New) The system for scanning objects of claim 26, wherein the light source lens has a slit to allow reflected light from the surface of the object to return to the linear array sensor without being effected by the light source lens.

32. (New) The system for scanning objects of claim 26, wherein the linear array sensor is a CMOS image sensor.

33. (New) The system for scanning objects of claim 26, wherein the linear array sensor is a CCD image sensor.

34. (New) The system of claim 26, further comprising an object height sensor which signals a controller to adjust a position of the illumination plane so that the illumination stripe at the surface of the object is coincident with the optical field of view.